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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,985	05/21/2001	Patrick Hourquebie	025219-317	8711

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Burns Doane Swecker & Mathis
Suite 400
1737 King Street
Alexandria, VA 22314-2727

EXAMINER
YOON, TAE H

ART UNIT	PAPER NUMBER
1714	9

DATE MAILED: 05/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

T-D 9

Office Action Summary

Application No.	Applicant(s)
09/786,985	Hourquebie et al
Examiner	**Group Art Unit**
T. Yoon	1714

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-15 is/are pending in the application.

Of the above claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-15 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☒ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____.

☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____.

Attachment(s)

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 8

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Action Summary

Preliminary amendement to claims 3-6, 9 and 19 has not been entered since it does not make a sense. New claims 19-23 have been renumbered as 11-15 under Rule 126.

Abstract is objected since it must be in single paragraph.

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10 and 15 are rejected under 35 U.S.C. 101 becausethe claimed invention is directed to non-statutory subject matter. The recited "Use of" is non-statutory subject matter, and "A method of using" is suggested.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 3 and 11 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The reicted "their copolymers" claims 3 and 11 is inadequatley described in the specification, and the scope of said copolymer is not defined.

The reicted "maximum purity" in claim 1 is inadequatley described in the specification since said "purity" is related to the concentration of one component, but the specification fails to recite any definition.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 and 10-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "maximum purity" in claim 1 is indefinite since said "maximum purity" is not defined.

The recited "Production method" in claims 2-8 lacks an antecedent basis, and "The method" is suggested.

The recirted "Material" in claims 11-14 lacks an antecedent basis in claim 2 wherein "the method" is recited.

Improper Markush language is recited in claims 3-5, 8 and 11-14, and a proper format is "--- is chosen from the group consisting of, A, B, C ---- and Z".

Regarding claims 3, 5 11 and 13, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

The recited "ethylene-propylenediene monomer and ethylene butacrylate" in claims 4 and 12 are not polymers and improperly broaden the scope of claim wherein the insulating polymer is recited. Also, the recited "butacrylate" is confusing since it is unclear whether it is butylacrylate or butadieneacrylate.

The recited "their derivatives" in claim 8 is indefinite in not specifying particular functional groups or substituents, and cancellation of "the" in line 3 is suggested. Also, cancellation of "the" before "copolymers" in line 7 of claim 4 and line 5 of claim 12 is suggested.

The recited "simple" in "a simple conducting polymer" in claim 7 is indefinite.

The recited "any of claim 17" in claim 15 is confusing and lacks an antecedent basis.

The recited "their copolymers" in claims 3 and 11 are indefinite since it is unclear with respect to its scope.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han et al (US 5,254,633) in view of Conn et al (WO 96/21694).

Han et al teach a process for the preparation of conductive polymer blend by coating one or more electrical conductive polymer onto non-conductive polymer particles at col. 2, line 62 to col. 3, lines 3. The instant method is seen at col. 3, lines 49-68. Various conducting polymers and non-conducting polymers are taught at col. 5, line 28 to col. 8, line 37. A conductivity of at least $10^{-9}ohm^{-1}cm^{-1}$ (col. 30, line 68) and various articles (col. 31, lines 12-45) are taught.

The instant invention further recites 10-5000 ppm (0.001-0.5 wt%) of the conducting polymer over Han et al. However, the use of various concentrations of a conducting polymer in a non-conducting polymer depending on the desired conductivity is routine in the art as taught by Conn et al who teach employing 0.1 to 20 wt% (1000-200,000 ppm) at page 3, lines 25-30 and various applications at page 5, lines 4-10.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to utilize 1000-5000 ppm of a conducting polymer in Han et al with teaching of Conn et al since Han et al teach a low conductivity of at least $10^{-9}ohm^{-1}cm^{-1}$ and since the use of a low

concentration of a conducting polymer in a non-conducting polymer depending on the desired conductivity is well known in the art.

Claims 9-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Conn et al (WO 96/21694).

Note that an invention in a product-by-process claim is a product, not a process. See ***In re Brown***, 459 F2d 531, 173 USPQ 685 (CCPA 1972) and ***In re Thorpe***, 777 F2d 695, 697, 227 USPQ 964 (Fed. Cir. 1985).

Conn et al teach employing 0.1 to 20 wt% (1000-200,000 ppm) of a conducting polymer in a non-conducting polymer at page 3, lines 25-30 and various applications at page 5, lines 4-10. Composite material is claimed in claim 1.

Thus, the instant invention lack novelty.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Monday to Thursday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

THY/May 7, 2002